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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/825,679

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Don Edvalson

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EXAMINER

JOHNSON, JOHNESE T

ART UNIT

PAPER NUMBER

2169

DATE MAILED: 10/17/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/825,679

Applicant(s)

EDVALSON ET AL.

Examiner

Johnese Johnson

Art Unit

2169

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 April 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-42 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-42 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on _____ is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>08/29/2005</u> | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 101

1. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 1-3, 6-15, and 39-41 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Claims 1-3, 6-8, 14-15, and 40-41 are directed to a file management system which is comprised of a file system and a controller for controlling access to data files in shared storage. According to applicants description, in paragraph [0022], line 2, a controller may be a module which is a set of program instructions and program instructions, *per se*, constitute non-statutory subject matter.

Claims 9-11 are directed to an allocator module which is simply a set of program instructions/ software module.

Claim 12 is directed to information which is non-functional descriptive material because it is only used as input.

Claim 13 recites "...software for communicating..." which is just program instructions.

Claim 39 recites a "means for storing a plurality of data files" and a "means for managing a plurality of data files", which is the proxy file system, and is merely a set of program instructions.

The content of these claims is directed to functional and non-functional descriptive material (See *In re Warmerdam*, 33 F3d at 1360, 31 USPQ2d at 1759). The

content is not structurally and functionally interrelated to a computer-readable medium thereby rendering it incapable of producing a useful, concrete and tangible result and is therefore, non-statutory.

Claim Rejections - 35 USC § 102

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

1. Claims 1-42 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S.

PG. Pub. No. 2003/0046369 issued to Sim et al (hereafter Sim).

Claim 1:

Regarding claim 1, Sim discloses:

A file management system (see paragraph [0045], lines 6-9), comprising:

a proxy file system for managing a plurality of proxy files (see paragraph [45], lines 6-7),

wherein the plurality of proxy files are associated with counterpart data files in a shared storage (see paragraph [0045], line 9) and include information for accessing the counterpart data files (see paragraph [0249], lines 2-10) from the shared storage; and

a controller for controlling access by a plurality of clients to the counterpart data files

in the shared storage using the proxy file system (see paragraph [0083], line 6).

Claim 2:

Regarding claim 2, Sim discloses:

wherein the controller is configured to provide the

clients with access to the counterpart data files in the shared storage using

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the access information included in the proxy files (see paragraph [0177], lines 1-2; wherein the controller manages the VFCS and application server through which access to the shared storage is provided).

Claim 3:

Regarding claim 3, Sim discloses:

wherein the controller is configured to:

recognize attempts by the clients to access the counterpart data files in the shared storage (see paragraph [0117] – recognizes requests);

retrieve from the proxy files the information for accessing the counterpart data files from the shared storage in response to the access attempts (see paragraph [0249], lines 2-10);

and

provide the clients with access to the counterpart data files in the shared storage using the access information retrieved from the proxy files (see paragraph [0251], line 1; wherein the blocks forwarded to application server comprise requested data).

Claim 4:

Regarding claim 4, Sim discloses:

wherein the shared storage comprises a port to receive access via a network from the plurality of clients (see paragraph [0145], line 4; wherein access is provided via ethernet).

Claim 5:

Regarding claim 5, Sim discloses:

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wherein the proxy file system comprises a non-sharable file system running on a local disk coupled to the controller (see paragraph [0044], line 17, and paragraph [0083]; wherein control unit may reside with vfcs).

Claim 6:

Regarding claim 6, Sim discloses:

wherein the proxy file system comprises at least one module to facilitate at least one of the following functions: security, locking, file sharing, and change notifications (see paragraph [0170]; wherein NFS supports file sharing, and representation features, such as: file access and file and record locking).

Claim 7:

Regarding claim 7, Sim discloses:

wherein the proxy file system is smaller in size than the shared storage (see paragraph [0085], lines 7-12).

Claim 8:

Regarding claim 8, Sim discloses:

wherein the controller comprises a server (see paragraph [0204]; wherein the control unit is a database server).

Claim 9:

Regarding claim 9, Sim discloses:

wherein the controller comprises:

an allocator module for allocating and de-allocating portions of the shared storage to the counterpart data files (see paragraph [0176]; wherein the control unit has a

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storage management subsystem); and
a network interface module for facilitating communications with the plurality of clients
(see paragraph [0083], lines 6-7; wherein the network manager facilitates
communication).

Claim 10:

Regarding claim 10, Sim discloses:

wherein the allocator module comprises program code for managing a plurality of
allocation units (see paragraph [0176]; wherein the control unit has a storage
management subsystem that allocates storage space and that software module is
comprised of instructions or "program code").

Claim 11:

Regarding claim 11, Sim discloses:

wherein the allocation units indicate locations of portions of the shared storage allocated
to information in the counterpart data files (see paragraph [0085], lines 1-5; wherein the
VFCS uses the block information to piece together the entire file; and, paragraph [0091],
line 2; wherein the blocks are broken down into smaller units).

Claim 12:

Regarding claim 12, Sim discloses:

wherein the information for accessing the counterpart data files comprises information
indicating locations of the counterpart files on the shared storage (see paragraph
[0085], lines 1-5; wherein information is used to piece together the entire file).

Claim 13:

Regarding claim 13, Sim discloses:

wherein the plurality of clients include software
for communicating with the controller and the shared storage (see paragraph [0044],
lines 15-19; wherein the application server is comprised of software).

Claim 14:

Regarding claim 14, Sim discloses:

The system of claim 1, further comprising a secondary controller
configured to mirror the controller and replace the controller if the
controller is disabled (see paragraph [0147], lines 9-13).

Claim 15:

Regarding claim 15, Sim discloses:

The system of claim 14, further comprising a secondary proxy file system
coupled to the secondary controller (see paragraph [0083], line 16; wherein the are
multiple distribution centers and each has a controller coupled to a proxy file system).

Claim 16:

Regarding claim 16, Sim discloses:

A file management method, comprising:

managing a plurality of proxy files (see paragraph [45], lines 6-7), wherein the plurality
of proxy files are associated with counterpart data files in a shared storage (see
paragraph [0118], lines) and include information for accessing the counterpart
data files (see paragraph [0249]) from the shared storage; and
controlling access by a plurality of clients to the counterpart data files in the shared

storage via the proxy files (see paragraph [0083], lines 11-13).

Claim 17:

Regarding claim 17, Sim discloses:

wherein controlling access comprises providing the clients with access to the counterpart data files in the shared storage using the access information included in the proxy files (see paragraph [0177], lines 1-2 – through VFCS and storage management).

Claim 18:

Regarding claim 18, Sim discloses:

wherein providing the clients with access to the counterpart data files comprises providing the clients with information indicating locations of the counterpart files on the shared storage (see paragraph [0085], lines 1-5; wherein the information is used to piece together the entire file).

Claim 19:

Regarding claim 19, Sim discloses:

wherein controlling access to the counterpart data files comprises:
recognizing attempts by the clients to access the counterpart data files in the shared storage (see paragraph [0117] – recognizes requests);
retrieving from the proxy files the information for accessing the counterpart data files from the shared storage in response to the access attempts (see paragraph [0249], lines 2-10); and
providing the clients with access to the counterpart data files in the shared storage

using the information retrieved from the proxy files (see paragraph [0251], line 1; wherein the blocks from forwarded to the application server comprise requested data).

Claim 20:

Regarding claim 20, Sim discloses:

In a system having a controller serving clients and a shared storage controlling data files, a method for managing information, comprising:
recognizing by the controller an attempt by a client to access a data file in the shared storage (see paragraph [0117]; wherein the control unit manages the VFCS);
accessing a proxy file corresponding to the data file in response to the access attempt (see Abstract, lines 7-12; wherein the virtual file system is the proxy);
retrieving from the proxy file information for accessing the data file from the shared storage (see paragraph [0249], lines 2-10); and
providing the client with access to the data file in the shared storage using the retrieved access information (see paragraph [0251], line 1; wherein the blocks from forwarded to the application server comprise requested data).

Claim 21:

Regarding claim 21, Sim discloses:

wherein recognizing the attempt to access a data file comprises receiving by the controller a request to access the data file (see Abstract, lines 7-12).

Claim 22:

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Regarding claim 22, Sim discloses:

wherein accessing a proxy file comprises accessing the proxy file from a local disk coupled to the controller (see paragraph [0044], line 14-19, and paragraph [0083]; wherein control unit may reside with vfcs).

Claim 23:

Regarding claim 23, Sim discloses:

wherein retrieving information for accessing comprises reading from the proxy file information indicating a location of the data file in the shared storage (see paragraph [0085], lines 1-5; wherein the VFCS uses the information to piece together the entire file).

Claim 24:

Regarding claim 24, Sim discloses:

wherein providing access to the data file comprises providing the client with information indicating a location of the data file in the shared storage (see paragraph [0085], lines 1-5; wherein the client access data via the VFCS which maintains location information).

Claim 25:

Regarding claim 25, Sim discloses:

wherein providing access to the data file comprises providing the client with information indicating a manner in which to open the data file in the shared storage (see paragraph [0248]).

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Claim 26:

Regarding claim 26, Sim discloses:

A method of reading information from a data file in a shared storage,
comprising:

receiving by a controller a request from a client to read from the data file in the shared
storage (see Abstract, lines 7-12);

obtaining by the controller information for reading the data file from a proxy file
corresponding to the data file in response to the request (see paragraph [0249],
lines 2-10); and

providing the information obtained from the proxy file to the client, wherein the
information from the proxy file enables the client to read the data file from the
shared storage (see paragraph [0251], line 1; wherein the blocks from forwarded
by the VFCS to the application server comprise requested data; and, paragraph
[0210], line 4 wherein the VFCS accesses shared storage in read-only mode).

Claim 27:

Regarding claim 27, Sim discloses:

The method of claim 26, wherein obtaining information for reading the data
file includes obtaining a location of a portion of the shared storage allocated
to the data file (see paragraph [0085], lines 1-5; wherein the VFCS uses the information
to piece together the entire file).

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Claim 28:

Regarding claim 28, Sim discloses:

The method of claim 26, wherein obtaining information for reading the data file includes obtaining information indicating a manner in which to read the data file from the shared storage (see paragraph [0248]).

Claim 29:

Regarding claim 29, Sim discloses:

The method of claim 26, wherein receiving a request from a client includes receiving the request over a network interposed between the client and the controller (see paragraph [0145], line 4; wherein access is provided via Ethernet).

Claim 30:

Regarding claim 30, Sim discloses:

The method of claim 26, wherein obtaining information for reading the data file includes obtaining the information for reading the data file in the shared storage from a proxy file corresponding to the data file located in a storage directly coupled to the controller (see paragraph [0044], line 17, and paragraph [0083]; wherein control unit may reside with vfcs).

Claim 31:

Regarding claim 31, Sim discloses:

A method of writing information to a data file in a shared storage, comprising:

receiving by a controller a request from a client to write information to a data file in the

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shared storage (see Abstract, lines 7-12, - request is received and paragraph [0210]; wherein the distribution station which is managed by the controller is capable of writing to shared storage);
acquiring by the controller an available portion of the shared storage in response to the request (see paragraph [0176]; wherein the control unit has a storage management subsystem that allocates storage space); and
inserting information identifying the acquired portion of the shared storage into a proxy file corresponding to the data file, wherein the proxy file is located on a storage directly coupled to the controller files (see paragraph [0085], lines 1-5; wherein the VFCS uses the inserted block information to piece together the entire file).

Claim 32:

Regarding claim 32, Sim discloses:

The method of claim 31, wherein receiving a request from a client comprises receiving the request over a network interposed between the client and the controller (see paragraph [0145], line 4; wherein access is provided via Ethernet).

Claim 33:

Regarding claim 33, Sim discloses:

The method of claim 31, wherein acquiring the available portion of the shared storage comprises identifying the available portion (see paragraph [0176]; wherein the control unit has a storage management subsystem that allocates storage space and the portion of space must be identified before it can be allocated).

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Claim 34:

Regarding claim 34, Sim discloses:

The method of claim 33, wherein identifying the available portion comprises examining a list of allocation unit numbers (see paragraph [0176]; wherein the control unit has a storage management subsystem that allocates storage space and the available space must be identified from a list of available space before it can be allocated).

Claim 35:

Regarding claim 35, Sim discloses:

The method of claim 31, further comprising allocating the acquired portion of the shared storage to the data file (see paragraph [0085], lines 1-5; wherein the VFCS uses the information to piece together the entire file).

Claim 36:

Regarding claim 36, Sim discloses:

The method of claim 31, wherein inserting information comprises writing allocation unit numbers into the proxy file (see paragraph [0085], lines 1-5; wherein the VFCS uses the inserted block information that has been written to it to piece together the entire file).

Claim 37:

Regarding claim 37, Sim discloses:

The method of claim 31, further comprising managing the proxy file by a non-sharable proxy file system (see paragraph [45], lines 6-7).

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Claim 38:

Regarding claim 38, Sim discloses:

The method of claim 37, wherein managing the proxy file comprises managing the proxy file by a non-sharable proxy file system running on a local disk directly coupled to the controller (see paragraph [0044], line 17, and paragraph [0083]; wherein control unit may reside with vfcs).

Claim 39:

Regarding claim 39, Sim discloses:

A file management system, comprising:

means for storing a plurality data files, the storing means accessible to a plurality of clients (see paragraph [0045], line 9 – shared storage);

means for managing a plurality of proxy files, wherein each of the plurality of proxy files is associated with a counterpart data file from among the plurality of data files in the storing means and includes information for accessing the counterpart data file (see paragraph [45], lines 6-7 – proxy file system); and

means for controlling access by the plurality of clients to the plurality of data files using the managing means (see paragraph [0083], line 6 – control unit).

Claim 40:

Regarding claim 40, Sim discloses:

The system of claim 39, further comprising secondary controlling means for replacing the controlling means if the controlling means is disabled (see paragraph [0147], lines 9-13).

Claim 41:

Regarding claim 41, Sim discloses:

The system of claim 40, further comprising secondary managing means, for managing the plurality of proxy files, coupled to the secondary controlling means (see paragraph [0083], line 16; wherein there are multiple distribution centers and each has a controller coupled to a proxy file system).

Claim 42:

Regarding claim 42, Sim discloses:

A computer-readable medium containing instructions for controlling a computer system (wherein a medium exists to drive the processes of the controller) coupled to a network to perform a method, the computer system having a processor for executing the instructions, the method comprising: recognizing an attempt by a client to access a data file in a shared storage (see paragraph [0117] – recognizes requests); accessing a proxy file corresponding to the data file in response to the access attempt (see paragraph [0251], line 1; wherein the blocks forwarded to application server comprise requested data); retrieving from the proxy file information for accessing the data file in the shared storage (see paragraph [0249], lines 2-10); and providing the client with access to the data file in the shared storage using the retrieved access information (see paragraph [0251], line 1; wherein the blocks from

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forwarded to the application server comprise requested data).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Johnese Johnson whose telephone number is 571-270-1097. The examiner can normally be reached on 4/5/9.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christian Chace can be reached on 571-272-4190. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


11 October 2006

J.J.


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